Statement of Volatility – Dell Precision M4700/M6700

⚠ **CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

The Dell Precision M4700/M6700 contains both volatile and non-volatile (NV) components. Volatile components lose their data immediately after power is removed from the component. Non-volatile (NV) components continue to retain their data even after power is removed from the component. The following NV components are present on the Dell Precision M4700/M6700 system board.

Table 1. List of Non-Volatile Components on System Board

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
Embedded Flash in embedded controller MEC5055	U54	192 KB of embedded Flash memory for keyboard controller BIOS code, asset tag and BIOS passwords	No	N/A
Panel EEDID EEPROM	Part of panel assembly	Non Volatile memory, 512 bytes.	No	Part of panel assembly
System BIOS	U52 (8M) U53 (4M)	Non Volatile memory, 32 Mbit (4 MB) and 64 Mbit (8 MB), System BIOS and Video BIOS for basic boot operation, PSA (on board diags), PXE diags.	No	N/A
Video BIOS	On GFx cards (nVidia N14x and AMD):	Non Volatile memory, 512 kbit (64 KB), Graphics system BIOS.	No	N/A
System Memory – DDR3 memory	Four SODIMM connectors: JDIM1,2,3,4	Volatile memory in OFF state **NOTE:** See state definitions later in text. Two to four modules must be populated. System memory size will depend on SODIMM modules and must be between 2 GB and 16 GB.	Yes	Power off system
System memory SPD EEPROM	On System memory SODIMM(s) – 2-4 present	Non Volatile memory 512 Bytes. Stores memory manufacturer data and timing information for correct operation of system memory.	No	N/A

Description	Reference Designator	Volatility Description	User Accessible for external data	Remedial Action (Action necessary to prevent loss of data)
RTC CMOS – BBRAM (battery backed up)	UH4	Non Volatile memory, 64 Bytes. Stores CMOS information.	No	N/A
Video memory – frame buffer	On GFx cards (nVidia N14x and AMD):	Volatile memory in off state. 2/2/4 GB GDDR5 for nVidia N14EQ1/EQ3/EQ5 discrete graphics systems. 2/2 GB DDR3 for nVidia N14PQ1/PQ3 discrete graphics systems. 2 GB GDDR5 for AMD Heathrow discrete graphics systems. 1 GB GDDR5 for AMD Chelsea discrete graphics systems.	No	N/A
LOM Serial Flash Memory	UH4	Non Volatile memory, built in PCH, for MAC address, LED mode, WOL settings, PXE settings.	No	N/A
Hard drive(s)	User replaceable - one or two.	Non Volatile magnetic media, various sizes in GB. May also be SSD (solid state flash drive).	Yes	Low level format
CD-ROM/RW/ DVD/ DVD+RW/ Diskette Drives	User replaceable	Non Volatile optical media.	Yes	Low level format/erase

CAUTION: All other components on the system board lose data if power is removed from the system. Primary power loss (unplugging the power cord and removing the battery) destroys all user data on the memory (DDR3, 1067 MHz). Secondary power loss (removing the on-board coin-cell battery) destroys system data on the system configuration and time-of-day information.

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